

## Health Disparities among Racial and Ethnic Groups in Rhode Island

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The health of racial and ethnic minority populations has been a focus of public health for many years, due to the disparities in health status, exposure to health risks, and access to health care that are revealed when these populations are compared to the White, non-Hispanic population. At the national level, the impact of poor health on the quality and length of life for minority citizens was considered to be so fundamental that one of the three overarching goals of *Healthy People 2000* was to reduce health disparities among the disadvantaged.<sup>1</sup> In *Healthy People 2010*, the goal has been made even more challenging; the nation is now committed to the elimination of such disparities entirely.<sup>2</sup>

Early in the last decade, the health disparities of minority populations in Rhode Island were documented in conjunction with the establishment of a minority health program in the Rhode Island Department of Health.<sup>3,4</sup> Many of the measures used were those that had been selected to monitor progress toward the achievement of the statewide health objectives in *Healthy Rhode Islanders 2000*.<sup>5</sup> Recently, as the Department has been evaluating the state's level of success in achieving those objectives, we have also re-measured the extent of health disparities in our minority populations. This report presents the findings for three selected measures of health status for which minority populations have been historically disadvantaged: homicide rates, infant mortality rates, and lead poisoning rates.

**Methods.** Measures were defined as in *Healthy Rhode Islanders 2000*.<sup>5</sup> Age-adjusted homicide rates by race and ethnicity for Rhode Island residents were computed from the number of deaths with an underlying cause of death of homicide for the period 1995-1997 and Rhode Island population estimates by age, race, and Hispanic origin for 1995-1997,<sup>6</sup> using the 1940 United States population as standard. Infant mortality rates were computed as deaths prior to one year of age divided by total live births during the period 1995-1997. Rates of lead exposure for children ages 6 years and younger were computed as the number of children with blood lead levels of 15 micrograms per deciliter divided by the

number of children tested during 1998. For each measure, rates were computed for persons of each race and for persons of Hispanic origin (independent of race where possible).

**Results.** There were marked differences in homicide rates by race and Hispanic origin in Rhode Island during 1995-1997. Rates for Blacks, Native Americans, and Hispanics were higher than the statewide rate; rates for Asians and non-Hispanic Whites were lower. (Figure 1) The rate for Black Rhode Islanders was especially elevated, eight times as high as the statewide rate. Since the period 1989-91, the statewide homicide rate declined 33% in Rhode Island, but the decline for Black Rhode Islanders was only 7%. Declines for Asians (83%) and Native Americans (71%) were relatively large, and the decline for Hispanics (34%) was close to the state average.

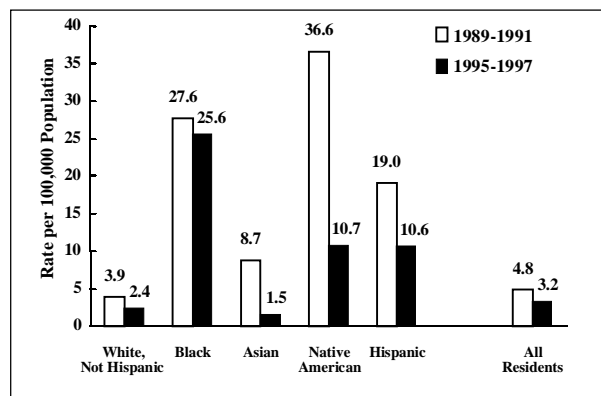


Figure 1. Average Annual Homicide Rate (Age-Adjusted), by Race and Ethnicity, Rhode Island, 1989-1991 and 1995-1997.

Infant mortality rates for minority racial and ethnic groups have historically been elevated both in Rhode Island and nationally. During 1995-1997, rates in Rhode Island for Blacks, Native Americans, and Hispanics ranged between 31% and 127% higher than the statewide rate, while the rate for Asians was 27% below the state average. (Figure 2) Since 1989-91, infant mortality rates for Blacks (down 44%), Asians (down 38%), and Native Americans (down 18%) have fallen, more rapidly than the statewide rate (down 27%) for Blacks and Asians, but the rate for Hispanics has increased 31%.

Rates of elevated blood lead levels were higher for children in all minority populations during 1998, with the rate for Asian children nearly six times the statewide rate. (Figure 3) Com-

## Health by Numbers

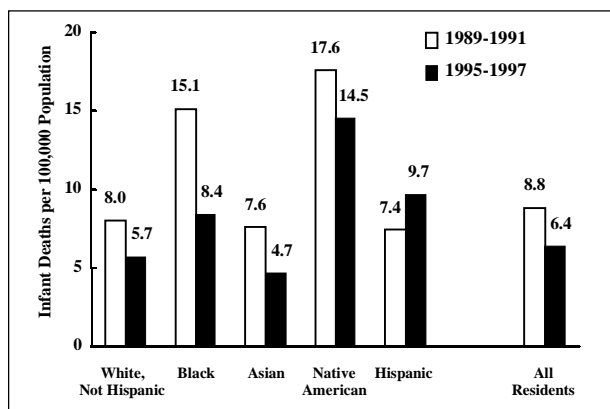


Figure 2. Average Annual Infant Mortality Rate, by Race and Ethnicity, Rhode Island, 1989-1991 and 1995-1997.

pared to 1994 rates (the first year for which data by race and ethnicity are available), only the rate for Hispanics has decreased more rapidly (down 68%) than the statewide rate (down 65%). Rates for Black and Native American children (down 49% and 22% respectively) have decreased less rapidly than average, and the rate for Asian children has increased 44%.

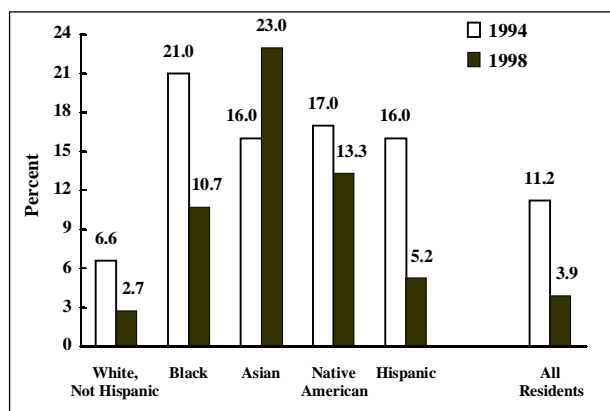


Figure 3. Prevalence of Blood Lead at 15 micrograms/dL or Greater, Ages 0-6 Years, Rhode Island, 1994 and 1998.

**Discussion.** Homicide rates, infant mortality rates, and rates of elevated blood lead levels are all indicators of health conditions affecting the children and young adults in a popula-

tion. Moreover, they reflect adverse factors that impact health more broadly, such as poor access to prenatal care, high rates of non-fatal violence, and poor housing conditions. These conditions and associated factors are among those that determine the lifelong health status and overall quality of life of a community's members. It is an accomplishment of some note that the statewide rates for these conditions have fallen by between 27% and 65% in a period of less than a decade in our state. These improvements represent good progress toward the objectives of *Healthy Rhode Islanders 2000*.

However, the progress has not been uniform across all racial and ethnic groups. For each of the three indicators examined, there is at least one racial and ethnic minority population that has seen its rate increase substantially relative to the statewide rate, thus increasing the disparity for this condition in this group. Thus, the progress in reducing disparities in these critical health indicators over the past decade in Rhode Island has been mixed despite the excellent improvements statewide. Put in this context, the *Healthy People 2010* goal of eliminating health disparities must be viewed as a formidable challenge for our state's public health community.

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### References

- <sup>1</sup>Public Health Service. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. Washington, DC: U.S. Department of Health and Human Services. 1990.
- <sup>2</sup>Internet: [www.health.gov/healthypeople](http://www.health.gov/healthypeople).
- <sup>3</sup>Hesser JE, Buechner JS. *The Health of Minorities in Rhode Island*. Providence RI: Rhode Island Department of Health. 1993.
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- <sup>5</sup>Rhode Island Department of Health. *Healthy Rhode Islanders 2000*. Providence, RI. 1994.
- <sup>6</sup>Internet: [www.census.gov/population/www/estimates/statepop.html](http://www.census.gov/population/www/estimates/statepop.html).

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